PATENT Serial No: 10/777,656

Docket No: 29287-142

## **IN THE CLAIMS**:

Please amend the claims as follows:

1. (Currently Amended) An optical transmission equipment which transmits for transmitting an amplified optical data signal and an optical surveillance signal a supervisory optical signal, comprising:

a pumping light source outputting a pumping light,

a doped fiber <u>inputting</u> to which an optical <u>a</u> data <u>optical</u> signal is input and which outputs said amplified optical data signal; and said pumping light, and outputting said amplified data optical signal,

a supervisory optical source outputting said supervisory optical signal, and an optical coupler multiplexing said amplified data optical signal and said supervisory optical signal,

a surveillance signal source which outputs said optical surveillance signal; and a coupler which multiplexes said amplified optical data signal and said optical surveillance signal;

wherein a wavelength of <u>said supervisory optical signal is substantially equal to a wavelength of said pumping light.</u> the optical surveillance signal is an output of an amplification wavelength range of said doped fiber, and wherein the transmission loss of said optical surveillance signal in a transmission fiber is substantially the same as the transmission loss of said optical data signal in said transmission fiber.

- 2. (New) An optical transmission equipment for transmitting an amplified data optical signal and a supervisory optical signal, comprising:
  - a first pumping light source outputting a first pumping light,
  - a second pumping light source outputting a second pumping light,
- a doped fiber inputting a data optical signal and said first and second pumping light, and outputting said amplified data optical signal,
  - a supervisory optical source outputting said supervisory optical signal, and

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an optical coupler multiplexing said amplified data optical signal and said supervisory optical signal,

wherein a wavelength of said supervisory optical signal is substantially equal to at least a wavelength of one of said first and second pumping light.

3. (New) An optical transmission equipment according to claim 2, wherein said first pumping light is input to said doped fiber in a same direction as a propagating direction of said data optical signal, and

wherein said second pumping light is input to said doped fiber in an opposite direction to said propagating direction of said data optical signal.

- 4. (New) An optical transmission equipment according to claim 2, wherein the wavelength of said first pumping light is substantially equal to the wavelength of said second pumping light.
- 5. (New) An optical transmission equipment for transmitting an amplified data optical signal and a supervisory optical signal, comprising:
  - a first pumping light source outputting a first pumping light,
  - a second pumping light source outputting a second pumping light,
- a doped fiber inputting a data optical signal and said first and second pumping light, and outputting said amplified data optical signal,
- a supervisory optical source outputting said supervisory optical signal, and an optical coupler multiplexing said amplified data optical signal and said supervisory optical signal,

wherein a wavelength of said first pumping light is substantially equal to a wavelength of said second pumping light.